REMARKS

Introduction

Applicant and his attorney thank Examiner Paul and his supervising SPE for the June 19, 2008 Interview in this application. Applicant's attorney also respectfully notes that he has been incorrectly identified as Timothy Baumann. Applicant's attorney actually attending the interview was Timothy Levstik.

With this amendment all of the independent claims have been amended and dependent claims have been amended such the dependent claims will comport with the amendment of the dependent claims. Claims 4, 6, 28-30 have been cancelled and claims 1-3, 7-27, 31-44 are pending of which claims 1, 8, 23, 31 and 41 are independent claims.

The Rejection

The Examiner rejected all of the independent claims based upon section 112 of the Patent Code based upon a negative limitation that the pass point not being part of the counter. This negative limitation has been eliminated from the claims.

The Examiner withdrew his indication of the allowability of claims 31 through 40 "based upon a through examination of the reference [Richmond]."

Finally the Examiner rejected all of the claims as anticipated based upon the Examiner's understanding of Richmond (USP 5,729,101). Applicant respectfully submits that the amended claims patentably distinguish Richmond.

Richmond Does Not Render The Pending Claims Unpatentable – Richmond's Controller Counts From A Fixed End Point, Applicant's Device And Method Do Not.

Richmond seeks to open and close barriers without hard contact with his end points. As discussed at the interview, ***Richmond uses his end points as reference points and counts from these reference points to determine a point from which his barrier "coasts."*** See abstract (middle); column 3, lines 19-27; column 4, lines 40 et seq. (see line 55 for coasting); column 7, lines 26-47; and column 12, lines 39 et seq. Richmond generally describes a gate operator which moves a gate horizontally from an open to a closed position where control of the gate is relative to a fixed end point beyond which the gate does not travel. At column 4, lines 39 to 51, Richmond describes his counting relative to a fixed end point,

> A control means is provided for measuring a count representative of fixed end position movement of the gate; that is, the amount of movement between one fixed end position to the other fixed end position. The control means also measures a count representative of each subsequent movement of the gate to the same end position and automatically adds a control count to increase the driving movement and hence, the driving distance, if the gate stopped short of that fixed end position. This control means will also subtract counts from the fixed end position movement in order to reduce the driving movement and hence, the driving distance on subsequent gate movements if the gate still contacts a fixed structure at the end position.

At column 6, lines 16 to 33 Richmond explains a problem with crashing the gate at the fixed end point and why his coasting feature is desirable.

> As a simple example, if a gate fixed end position count were 500 and on a subsequent movement, the gate stopped at 490, the control means would automatically add additional counts and there would, of course, be no hard impact. However, if the gate operator attempted to move the gate beyond a position of 500, there would be a hard impact with a fixed structure and hence, the gate operator would start automatically reducing the number of counts in the fixed end position count by a predetermined number of control counts. Thus, if the gate operator was driving the gate for an excess of ten counts and on subsequent movements, one control count was eliminated for each gate movement between an opened and closed position and the gate still contacted the fixed end position, there would be ten hard impacts before complete correction without the coasting feature. Accordingly, the coasting feature is preferred.

At column 5, lines 24 to 35 and lines 41 to 44, Richmond describes the operation of a coasting feature which cuts driving power to the gate before the end point is reached where the gate coasts shut. Here the coast is governed by counts from the fixed end point beyond which the gate does not travel.

> The control means operates in conjunction with a detecting means to determine if the gate actually stopped at the fixed end positions toward which it was moving. If the gate stopped coasting before it reached that end position, the control means causes the gate to be driven for a greater distance on a subsequent movement between the fixed end positions, so that there would be a lesser coasting distance. If the gate advanced to the fixed end position toward which it was moving, then the control means will cause the gate to be driven for a shorter distance on a subsequent movement with a longer coasting distance.

* * * *

> The gage operator of the present invention utilizes a measured count, or fixed end position count, representing the movement of the gate between one fixed end position to the other fixed end position.

As can be seen from the above statements from Richmond, ***Richmond counts from a fixed end position of a full range of travel for his barrier***. If Richmond's gate crashes closed at an end point (e.g. 500 counts), Richmond's controller would reduce the number of counts to the end point beyond which the gate will not advance. See column 6, line 24. To avoid constant crashing, Richmond uses a coasting feature where the driving power for the gate will stop and the gate will coast shut. But again the power is cut relative to an end put beyond which the gate will not advance. ("The value in the open/close counter register ***will be compared to the opened or closed fixed end position register count*** and the open or close back-off switches to determine if the gate coasted to the proper position", see column 17, lines 41- 45 of Richmond with emphasis added). In short Richmond's problem is to preclude his gate from crashing into a fixed position beyond which the gate will not advance and beyond which there is not counting. This is not the case with applicant's system.

Applicant's device, method and system utilize one or more passpoint events which define a count zone both upstream and downstream the passpoint where counter counts signals representative of movement and the position of a barrier or object as it passes through the count zone. ***The count zones are/is between or intermediate the end points of travel of an object or barrier. Recalibration occurs when an anticipated passpoint event does not correlate with a count value in the count zone which is not at an object's travel end point. This not only avoids the object or gate crashing at an end point, but also avoids the gate crashing to achieve calibration!*** This patentably distinguishes the pending claims from Richmond.

Moreover, Richmond does not describe multiple passpoint events (method claims 20 - 22 and independent method claim 23 and claims depending from independent claim 23 and dependent method claim 38 – 40 which depend from independent claim 31 and independent controller claim 41 or movable barrier operator claim 7).

The Examiners Have Misconstrued Richmond

At the interview the Examiners pointed to column 14, lines 16 – 45 and Richmond's use of Hall sensors to say that Richmond describes using Hall sensors in the same way applicant uses passpoint signal generators and passpoint events. That is not the case. ***All***

Richmond's Hall sensors do is show movement of a gate.. For example see column 14, line 44-45 of Richmond. They do not locate where the gate or barrier is. Nor do the Hall sensors calibrate from a count value. Moreover even if they did, they would calibrate from an endpoint of the movement of a barrier.

At the interview the Supervisory Examiner acknowledged that Richmond does not describe multiple passpoint signal generators which clearly provide passpoint events which are not at the open and closed endpoints as per Richmond. This is because the claims preclude the passpoint events and generators from being at the open and closed end points of the barrier.

The Claims Have Support In the Specification

As an example for support, support for claim 1 is set forth below:

- a movable barrier movement sensor configured to sense movement of a barrier and effect signals which reflect movement of the barrier upstream and downstream;
- a counter that is responsive to the signals effected by the barrier movement sensor to provide a corresponding count having a plurality of count values which indicate a position of a barrier; **see page 5, line 12; page 6, line 16; and page 10, lines 3-8;**

- at least one passpoint signal generator which effects at least one passpoint event from at least one fixed reference point between an open and closed position of the barrier and defines a location of at least one count zone defined by count values which are intermediate the full range of movement of the barrier and which count values are both upstream and downstream of the fixed reference point; **see page 4, line 13; page 10 lines 3-8 (count used to determine position); page 6, lines 29-31 (and the reference to a barrier moving from a fully open to a fully closed position or visa versa); Figure 3 and page 9, lines 1-7 (and the reference to intermediary passpoint events)**; and

- a movable barrier position determiner that is responsive to the counter and the passpoint signal generator and which correlates the count of the counter with the passpoint event as the counter counts signals which reflect movement and the position of the barrier through the count zone, a count value being recalibrated from a passpoint event between the open and closed position of the barrier when an anticipated passpoint event between the open and closed position of the barrier does not correlate with a count value in the count zone as

the barrier moves past the passpoint reference point between the open and closed position of the barrier such that a position of the barrier is indicated relative to a reference point that is intermediate the full range of travel of the barrier. **See Figure 4; page 7, five lines from bottom; and page 10, line 11 and Figure 4.**

As a further comments as to support:

Multi passpoint events have support at page 4, line 13 and multiple passpoint signal generators have support at page7, line 29 and page 11, four lines from the bottom; and

passpoint generators not being at the open and closed endpoints have support in Figure 4 and page 9, lines 1-7.

Conclusion

Richmond does not describe passpoint events, does not describe events between two end points from which counts are recalibrated, nor does Richmond describe multiple passpoint generators or events between two end points from which counts are recalibrated. This is not just academic. Recalibration using applicant's device and method when an anticipated passpoint event does not correlate with a count value in a count zone not only avoids the object or gate crashing at an end point, but also avoids the gate crashing to achieve calibration. Hence, applicant respectfully request reconsideration and allowance of the pending claims.

The Commissioner is hereby authorized to charge any additional fees which may be required in this application under 37 C.F.R. §§1.16-1.17 during its entire pendency, or credit any overpayment, to Deposit Account No. 06-1135.

Respectfully submitted,

FITCH, EVEN, TABIN & FLANNERY

Dated: July 9, 2008

Timothy E. Levstik
Registration No. 30,192

120 South LaSalle Street, Suite 1600
Chicago, Illinois 60603-3406
Telephone (312) 577-7000
Facsimile (312) 577-7007